BOARD OF REGENTS
STATE OF IOWA

AGENDA ITEM 6d
FEBRUARY 6, 2007

Contact: Joan Racki

FACILITIES GOVERNANCE REPORT

Actions Requested: Receive the report and consider recommending to the Board that it reaffirm its support for continued:

1. inter-institutional collaboration and coordination on facility issues, and
2. institutional correction of identified fire safety and deferred maintenance deficiencies within the limits of available resources.

Executive Summary: This, third annual Facilities Governance Report, required by the Regent Policy Manual, replaces the previous annual governance reports on energy conservation, fire and environmental safety, and deferred maintenance. The report is intended to provide the Property and Facilities Committee and Board with a broad overview of the facilities at each of the Regent institutions and the condition of these facilities, consistent with the Board's focus on accountability and effective stewardship of existing resources, one of the four priorities of the Board's strategic plan.

Along with its human resources and its intellectual, financial and equipment assets, facilities are one of the primary resources of a higher education institution. Quality facilities help ensure excellent academic programs, and the ability to attract and retain faculty, staff and students.

Regent Facilities: Academic/research/administrative (general fund) facilities at the Regent institutions total approximately 17 million gross square feet of the total 34 million gross square feet of Regent enterprise facilities. Categories of other facilities include University Hospitals and Clinics, residence systems, agricultural experiment station and self-supporting operations, including student unions, parking systems, etc. The replacement value of all Regent facilities is estimated at $11.4 billion, of which $6.0 billion is the replacement value for academic/research/administrative facilities. The Regent institutions have a total of 4,510 on-campus acres and 1,021 off-campus acres, excluding farm acreage; these amounts are unchanged from the acreage reported last year.

Optimal Utilization of Facilities: Each of the universities emphasizes space utilization in its stewardship of existing facilities and has in place policies, procedures, practices or principles to help ensure the optimal utilization of facilities. These are consistent with the strategies and policies adopted by the Board in May 2006. Information on institutional specific initiatives can be found in Attachment A.

Institutional Coordination/Cooperation: In the previous two reports, the universities provided an extensive list of collaborative and coordinated efforts in facilities-related areas. This collaboration allows the universities to share best practices with each other and to pool resources to investigate and pursue innovative and cost saving approaches.

New initiatives reported this year include the commencement of on-going inter-institutional custodial meetings and the re-institution of grounds/landscaping meetings; increased discussions and the exchange of information related to energy costs, and opportunities for efficiencies and more environmentally sensitive sources of supply; and the initiation of a building and mechanical code update class for university design and construction personnel. A listing of the new initiatives provided by the institutions is included in Attachment A.

Energy Conservation and Management: Each of the Regent institutions began major efforts in the 1970s to reduce energy usage. With the Board's adoption of the energy/environment surcharge in June 2006 and the student governments' interest in reducing energy consumption and minimizing energy costs, energy conservation and the use of alternative fuels have re-emerged as important topics of discussion.

The institutions report that the campus energy conservation task forces/councils are moving forward with their work. The groups are working to enhance conservation efforts and explore increased uses of renewable energy. Energy management strategies include building system and utilities infrastructure improvements, energy purchasing/use strategies and expansion of energy awareness. Further information is included in Attachment B.

Fire and Environmental Safety Deficiencies and Deferred Maintenance: Fire safety deficiencies (identified by the State Fire Marshal, other entities engaged in fire safety reviews or institutional personnel) and deferred maintenance (repair or replacement of all, or a part of, an existing capital asset that was not repaired or replaced at the appropriate time because of a lack of funds) can be corrected as individual projects, incorporated into major renovations / rehabilitations, or eliminated through the demolition of structures. The Board's FY 2008 capital request, approved at its September 2006 meeting, includes $25 million for individual projects and $34.8 million for renovation / rehabilitation projects, which would correct a significant amount of fire safety and deferred maintenance deficiencies.

The State Fire Marshal's Office and other external entities have identified fire safety deficiencies in general fund facilities which the institutions have estimated would cost $8.3 million to correct; this amount is higher than the amount reported for Fall 2005. It is important to note that identified, potentially life-threatening fire safety deficiencies are promptly addressed and corrected, or facilities are closed until they can be made safe. Other identified deficiencies are prioritized for correction. Progress in addressing fire safety issues will continue to be challenged by new safety standards, aging buildings, and changes in building usage.

The Regent institutions report a total of $456.5 million in deferred maintenance in general fund facilities and utilities. This amount is $51.2 million (12.6%) higher than the amount reported for Fall 2005. While part of the increase (approximately 5.5%) is due to increased construction costs, the operating budget reductions of recent years have negatively impacted the ability of the institutions to reduce fire and environmental safety deficiencies and correct deferred maintenance since operating budget building repair funds provided the largest fund source for the projects completed from FY 1993 – FY 2006. Further information is included in Attachment C.

Report Organization: The report includes the following attachments:

BACKGROUND

Campus Facilities: Regent facilities total 33.7 million gross square feet; more than 21 percent of the square footage was constructed during the period 1961-1970. This construction "boom" was similar to the "boom" found among other higher education institutions in the United States.

The age of facilities is one of the factors contributing to the amount of deferred maintenance and the presence of fire safety deficiencies. Renovation provides a means to modernize facilities to meet current needs and to address deferred maintenance and fire safety deficiencies. The following table summarizes the Regent institutional total gross square footage (GSF) and academic/research/administrative (including Oakdale) total GSF by year of construction.

	Regent Total Square Footage		Academic/Research/ Administrative Square Footage*	
Years	GSF of Initial Construction	Percent of Total	GSF of Initial Construction	Percent of Total
Pre- 1930	5,291,236	15.70	3,802,615	22.29
1931-1950	1,845,480	5.48	1,046,491	6.13
1951-1960	2,385,668	7.08	935,488	5.48
1961-1970	7,314,151	21.70	2,907,588	17.04
1971-1980	5,605,984	16.63	3,357,616	19.68
1981-1990	3,960,910	11.75	1,690,521	9.91
1991-2000	4,792,529	14.22	2,081,327	12.20
2001 – present	2,508,136	7.44	1,239,606	7.27
Total	33,704,094	100.00	17,061,252	100.00
*Includes Oakdale				

The total square footage by institution, by function, is as follows:

	SUI	ISU	UNI	ISD	IBSSS	Total
Acad. / Res. / Admin.	7,379,000	6,570,707	2,538,538	381,500	191,507	17,061,252
UIHC	3,635,439					3,635,439
All Other	4,975,113	6,132,033	1,900,257			13,007,403
Total	15,989,552	12,702,740	4,438,795	381,500	191,507	33,704,094

Capital Expenditures: Since FY 2002 the Regent institutions have spent more than $1.0 billion for capital projects with project costs exceeding $250,000.

The following table compares institutional expenditures for FY 2002 – FY 2006.

Projects with Costs Exceeding $250,000 – All Funds*										
($ in millions)										
		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006	
		#		#		#		#		#	
		Proj	Exp	Proj	Exp	Proj	Exp	Proj	Exp	Proj	Exp
SUI		230	$ 95.1	180	$ 79.5	199	$119.3	183	$167.6	183	$168.1
ISU		69	54.8	74	75.3	58	82.3	60	45.7	69	38.6
UNI		29	10.3	28	26.6	25	22.2	27	21.7	23	26.3
Total		328	$160.2	282	$181.4	282	$223.8	270	$235.0	275	$233.0
* As submitted by the institutions to the Board Office on capital project status reports.											

The expenditures are from all sources of funds including capital appropriations; building renewal (repair) funds; institutional road funds; gifts and grants; income from treasurer's temporary investments; proceeds of academic building, dormitory, telecommunications, and other revenue bond issues; and university hospitals building usage funds and revenue bonds.

Optimal Utilization of Facilities: In May 2006**,** the Board adopted policies and procedures on the optimal utilization of facilities. The University of Iowa reports that it emphasizes planning and space utilization in its stewardship of facility assets and has employed policies and processes to ensure continued functionality, adequacy and utilization of campus space and facilities. The University's Space Utilization Committee oversees the reassignment of space; the University continually assesses the amount of space assigned to individuals and departments, and the productivity and suitability of that space. Facilities Management is instituting new space-management software that will provide accurate and timely space data to monitor and evaluate current space utilization and assignment opportunities.

Iowa State University reports that it has adopted policies, procedures and practices to provide for the optimal utilization of existing campus facilities. The University's Policy Manual states that space is a limited resource owned by the University and available for reallocation to support the University's mission. The University's approach emphasizes that the optimal use of space includes reallocation to meet the best use, remodeling when necessary to provide functionally appropriate facilities to meet program needs, and construction of new space if no other alternative is acceptable or available. Under the proposed Resource Management Model of budgeting currently under consideration at the University, units would pay the full operating costs of the space they use.

As part of its Space Assignment Principles and Procedures, the University of Northern Iowa states that space on campus is University space and should be utilized for the maximum benefit of the entire University. All instructional space assignments are made by the Registrar's Office in consultation with the Dean's Academic Affairs Council. The Office may assign University classrooms or laboratories to a specific college or department for priority use while retaining the authority to schedule the space when not in use. The University's Facilities Planning Advisory

Committee reviews and makes recommendations for the utilization of spaces vacated due to renovations or new construction.

The Iowa School for the Deaf continues to utilize its space as effectively as possible. Portions of facilities that are no longer needed for School functions have been leased out; the School reports that the relationships developed through these leases have been beneficial to all parties.

Iowa Braille and Sight Saving School continues to implement the Task Force recommendations including a key recommendation that the School "continue to improve efficiency and effectiveness of services supported by the Vinton site, faculty and staff, including continued development of flexible and innovative services delivered in regional locations as needed and continued work with Iowa State University to finalize recommendations for efficient use of physical facilities in concert with the feasibility study." Bids were received on January 23, 2007 for renovation of the second floor of Old Main to allow for consolidation of functions within the main building.

Institutional Cooperation / Coordination: The Regent universities have, for a number of years, worked together and coordinated efforts related to facilities. This collaboration allows the universities to share with each other best practices and to pool resources to investigate and pursue innovative and cost saving approaches. Iowa State University Facilities Planning and Management is responsible for the administration of capital projects at the two special schools and provides technical consultation as needed.

New collaborative and coordinated efforts included in this year's institutional reports are:

- The three universities began on-going inter-institutional custodial meetings and reinstituted grounds/landscaping meetings, which had not been held for more than 10 years.
- A subcommittee of the University of Iowa Energy Conservation Advisory Council, Facilities Management staff, Student Services and Residence Services is working with the University of Northern Iowa's Center for Energy and Environmental Education to help create a campus energy challenge.
- The University of Iowa arranged a building and mechanical code update class, held at the University of Northern Iowa, for representatives from the Regent institutions and the State Fire Marshal's Office.
- The three universities evaluated the benefits and potential cost savings from bidding limestone supply and ash removal for all three institutions. When ISU recently bid limestone supply and ash removal, it invited suppliers to consider pricing for all three institutions. The ash removal contract award contains provisions for both UI and UNI to use the same pricing structure.
- The three universities participated in networking, including the University of Iowa Energy Expo, Big Ten and Friends Energy Conservation and Management Conference, and Safety Best Practices.

ENERGY CONSERVATION AND MANAGEMENT

The Regent institutions are aggressively pursuing methods to reduce energy consumption and energy costs and to use renewable energy sources. In June 2006, the Board approved a temporary energy/environmental surcharge and encouraged the students and the universities to collaboratively reduce energy consumption on the campuses.

The following is a very brief summary of the information provided by the institutions; further information is included in the institutional reports available from the Board Office.

University of Iowa: The University reports that it is taking an aggressive approach to reducing the amount of energy consumed in its facilities. The Energy Conservation Advisory Council, a group of faculty, staff, students and administrators formed in 1994, has promoted energy conservation across campus. The University is currently creating a comprehensive energy policy and campus-wide energy challenge to reduce energy use per square foot by 10 percent and increase use of renewable energy by 15 percent by 2013. The plan offers strategies to promote energy conservation; deliver building systems that are optimized via commissioning, improve customer satisfaction with enhanced building controls, extend equipment life and reduce maintenance costs, and continue to reduce energy consumption.

Campus-wide energy system improvements involve an examination of specific energy systems and identification of both design standards and energy conservation measures that can be implemented. In FY 2005, the University initiated chilled water optimization projects in both the University of Iowa Hospitals and Clinics (UIHC) and general fund buildings. As of November 2006, the improvements resulted in a cost avoidance of over $2 million for UIHC and $600,000 for the general fund buildings. A lighting standards study was completed in FY 2006.

In FY 2005, a steam trap maintenance program was initiated to correct improperly functioning steam traps. This on-going program typically saves 5 to 10% of the steam usage in a building.

The University continued its energy audit program in FY 2006. Building energy audits focus on collecting information about energy usage and costs for each building, compiling an overview of the building energy systems and the capabilities of the building automation systems, and determining which buildings warrant more detailed studies. The University reports that the energy audit program achieved over $275,000 in savings in FY 2006.

Since FY 2003, the University has partnered with Quaker Oats (Cedar Rapids plant) to use unprocessed oat hulls (the outer shell of an oat grain that remains after the soft, protein-containing core has been removed by milling the grain) in a circulating fluidized bed boiler. Since January 2003, this project has displaced 51,472 tons of coal with biomass. Fuel savings (compared to the equivalent cost of coal) since the beginning of the program total approximately $2.1 million, with $586,000 of savings occurring in FY 2006.

More information can be obtained from the University's energy web site http://energy.uiowa.edu/index.htm.

Iowa State University: Iowa State University is in the sixth year of a comprehensive energy conservation initiative. Under this program, the University reports that it has saved approximately $6.0 million in five years, compared to the average cost of utilities in the three years prior to commencement of the program.

Under the energy conservation program, building specific energy plans were developed. These plans are posted on an energy web page http://www.fpm.iastate.edu/utilities/energyefficiency/ with energy conservation suggestions, frequently asked questions, and progress benchmarks.

The building specific energy plans call for idling HVAC equipment during off-hours, and revising temperature standards to 70 degrees during the day in winter, and 76 degrees during the day in summer. There is an exemption process in place whereby sensitive research activities can request more restrictive environmental criteria to protect their activities. All exemptions must be approved by the appropriate dean or vice president by signature.

The energy task force, which is being revitalized with new membership and broader student involvement, had its first meeting prior to semester break. The committee consists of 18 members from a broad consistency of the campus. One of the co-chairs is the student body president.

In FY 2007, the University will collaborate with the City of Ames to issue a Request for Proposals for wind power. The University intends to evaluate the marketplace and the financial viability of purchasing up to 10% of its electrical energy from renewable sources.

University of Northern Iowa: The University reports that improving energy efficiency remains a high priority. In April 2006, a Facilities Service Energy Council was formed and in September 2006, President Allen established a University Energy Conservation Committee. Both groups are working to enhance environmental awareness and energy conservation efforts, including education of and partnering with the campus and Cedar Valley communities.

Three of the eight tasks of the University Energy Conservation Committee, as outlined by President Allen, are: 1) engage the University community in identifying ways to reduce energy/energy related costs; 2) complete an environmental audit of the campus identifying what the University is currently doing and/or can do to reduce energy; and 3) identify best practices in higher education for attaining energy efficiency and sustainable operations.

In the last year, meetings have taken place with Cedar Falls Utilities to explore partnership opportunities to improve energy and environmental sustainability. The discussions have centered on the possible use of renewable energy, including biomass fuels and wind generation.

The University's Facilities Services has developed a Campus Energy Plan with the goals of operating the campus as a model of energy efficiency and ensuring the sustainable use of energy on campus. Some of the initiatives pursued during the last year include: installation of a new building automation file server to help improve operating efficiencies, development of a list of energy conservation measures to reduce energy usage, completion of a campus audit for incandescent exit signs, receipt of proposals to conduct energy audits of four major buildings, and installation of vending misers on soda machines.

Iowa School for the Deaf: A number of years ago the boilers in the School's Power Plant were replaced, with the new units being appropriately sized for the campus heating/cooling load, as well as being more energy efficient. The School reduced its natural gas consumption in FY 2006 to approximately 65% of the level of FY 2000.

Some of the School's recent initiatives to maintain and further reduce consumption include: major window and exterior door replacements; changed design standards for roofing replacement projects; repair and replacement of thermal pipe insulation; use of more efficient lighting bulbs and ballasts; installation of stand-alone kitchen equipment, alleviating the need to run the central boiler plant during temperate conditions; reduction of classroom and administration building temperatures during the winter heating season; and installation of occupancy sensors in restrooms.

The School also entered into a cooperative energy efficiency awareness program with MidAmerican Energy to foster a heightened level of awareness among School stakeholders.

Iowa Braille and Sight Saving School: A geothermal heating and cooling system was recently installed in Old Main; a similar system had previously been installed in Rice Hall. These two buildings are no longer dependent upon natural gas for heating. With the installation of these systems, use of a second campus natural gas boiler, which primarily provided back-up, has been discontinued. The geothermal systems also cool the buildings much more efficiently than the window air conditioners which they replaced.

The School also reports that the building automation system is being used to schedule systems to provide heating and cooling when areas are being used. The steam trap maintenance program is continuing as time permits.

FIRE AND ENVIRONMENTAL SAFETY AND DEFERRED MAINTENANCE

BACKGROUND

Fire and Environmental Safety: Fire and environmental safety standards are established by several agencies, including the State Fire Marshal and federal and state governmental regulatory entities. The State Fire Marshal's Office or other external entities may identify deficiencies during campus inspections, or campus personnel may note the deficiencies.

Potentially life-threatening deficiencies are promptly addressed and corrected, or the facilities are closed until they can be made safe. Lesser risks are prioritized using multiple factors including hazard assessments and regulatory requirements. Corrective work is undertaken as funds are available, or the fire safety improvements may be accomplished as part of a renovation project. Each year, there are subtractions to the list as work is accomplished. Additions to the list can result from the altered use of a space, which changes the applicable code requirements, or the new identification of a deficiency due to different interpretations of the code. Thus, the amount needed to correct the deficiencies does not necessarily decline by the amount that institutions have expended since the previous inspection.

Each Regent institution cooperates with the State Fire Marshal in establishing fire safety priorities and has a systematic method for determining the priority of fire safety improvements to be undertaken. Citations from the State Fire Marshal can be classified as (1) user [housekeeping or procedural items such as use of a doorstop to prop open a door], (2) maintenance [items that require no design and minimal expense, such as door repairs], or (3) other deficiencies [items for which the correction requires an outlay of funds beyond facility management maintenance funds; these items are prioritized].

Environmental safety deficiencies may be identified by campus personnel and regulatory entities. Environmental safety issues include asbestos, lead, underground storage tanks, spill prevention control and countermeasure plans, storm water pollution protection plans, polychlorinated biphenyl's (PCB's), mercury, the clean air act, and radioactive sites.

Deferred Maintenance: For a number of years, the institutions and Board Office have used the following common definition: Deferred maintenance is the repair or replacement of all, or a part of, an existing capital asset that was not repaired or replaced at the appropriate time because of a lack of funds.

Deferred maintenance is dependent upon time and is sometimes referred to as "capital renewal backlog." Replacement of a building or infrastructure system or component when it should be replaced is building renewal, not deferred maintenance. Deferred maintenance results from inaction on normal maintenance, including planned and preventive maintenance, and renewal and replacement projects.

Adequate funding of regular maintenance can significantly extend the useful lives of facilities and their components. Adequate funding of building renewal is also needed to replace building components.

Deferred maintenance in higher education is a national problem and is partially the result of building booms that occurred during the 1960s and 1970s. The facilities built at that time have

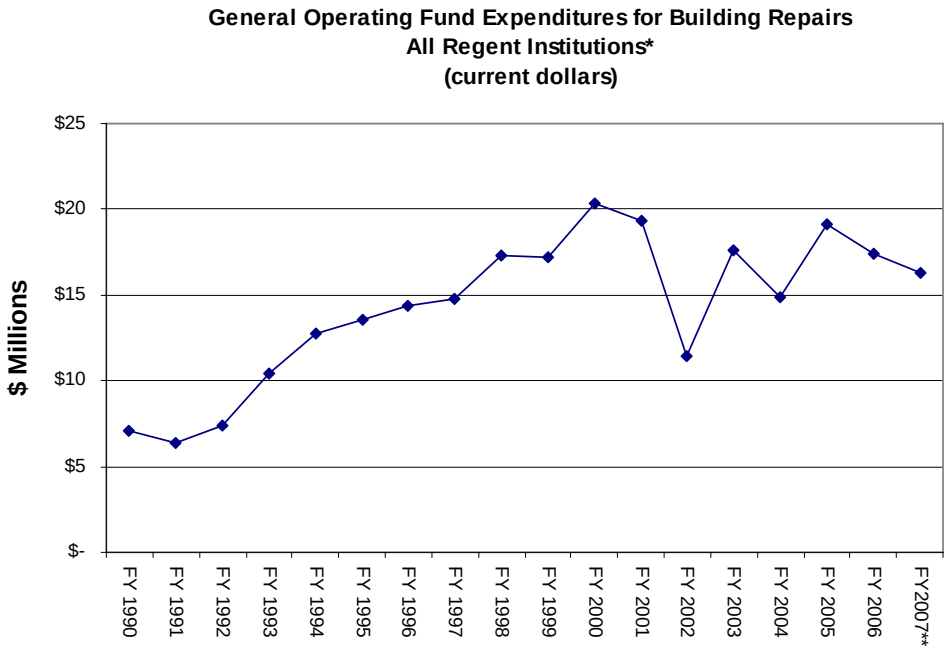
aged and many of their component systems have reached the end of their design lives or have become obsolete.

Funding Sources: The Regent institutions have made major efforts to correct fire and environmental safety issues and deferred maintenance over the last several years and have received significant state assistance.

Major funding sources for fire safety and individual deferred maintenance projects (not including deferred maintenance items completed as part of renovations) completed from FY 1993 through FY 2006 at the universities and special schools include: general fund operating budgets ($99.0 million); utility renewal and replacement funds ($42.2 million); proceeds from academic building revenue bonds and capital appropriations ($24.0 million), income from treasurer's temporary investments ($20.3 million), and UIHC building usage funds ($18.4 million).

Building Repair Budgets: As noted above, the largest source of funds to correct the identified deficiencies has been operating budget building renewal (repair) funds. Thus, adequate funding of this item is a critical factor in reducing fire and environmental safety deficiencies and deferred maintenance, and minimizing future facility needs.

Due to significant budget reductions, Regent general education, operating budget building repair expenditures declined, in total, from a high of $20.3 million in FY 2000 to a budgeted amount of $16.3 million in FY 2007, as shown in the following graph.



* Does not include UIHC
** FY 2007 budgeted amount as approved by Board in August 2006

The FY 2007 budgeted amount represents approximately 0.27% of the estimated $6.0 billion replacement value of the university and special school general educational facilities and utilities. According to national standards, this percentage should, at a minimum, be equal to 1% of the replacement value of the facilities to prevent their further deterioration.

ANALYSIS

The budget reductions of recent years have hindered the institutions' abilities to correct fire and environmental safety deficiencies and have resulted in increased deferred maintenance. Maintenance cycles and preventative maintenance activities have been delayed or eliminated, placing buildings and occupants more at-risk for unanticipated building system outages. The inability to make needed repairs/replacements of roofs, exterior building envelopes, windows, plumbing and electrical systems can cause further damage to the facilities, thus increasing the cost of future repairs.

Fire and Environmental Safety: From FY 1993 (the first year in which data were collected) through FY 2006, fire safety projects completed totaled $47.0 million in general fund facilities (an average of $3.4 million per year). Projects planned for or continued in FY 2007 total $3.1 million. Institutional data are shown on Table 1, Page14.

The institutions indicate that $7.9 million are needed to correct fire safety deficiencies in general fund facilities identified in past inspections by the State Fire Marshal as shown below.

FIRE SAFETY DEFICIENCIES

Additional Funding Needed to Correct Fire Safety Deficiencies Identified by External Entities[1] General Fund Facilities ($ Thousands)

	Fall 2006 (FY 2007)
SUI (includes Oakdale)	$ 5,300.0
UIHC	1,200.0[2]
ISU	1,307.6
UNI	380.0
ISD	0.0[3]
IBSSS	100.0
Total	$8,287.6

[1]Includes items identified by State Fire Marshal's Office and other external entities; excludes work to be included as part of major renovations in the Board approved Five-Year Capital Plan, in buildings to be demolished, and for which waivers from the State Fire Marshal are to be requested.

[2]Identified deficiencies reported to JCAHO (Joint Commission on Accreditation of Healthcare Organizations).

[3]Inspection report for 2006 not yet received; the report could show some items that need correction.

Institutional estimates of the additional funding needed to correct fire safety deficiencies have not changed significantly from Fall 2005 to Fall 2006 with the exception of the University of Iowa, which has reported an increase of approximately $3.5 million (from $1.8 million to

$5.3 million) in the funds needed to correct the fire safety deficiencies. The University reports that this increase is due primarily to a set of new, more thorough inspections; each month approximately five to eight buildings are inspected by the State Fire Marshal's Office with assistance from the University's Fire Safety and Security Coordinator. (Last year's report was based upon the most recent inspection of record, which was conducted by the State Fire Marshal's office in 2002. This inspection was conducted using a saturation approach in which 40 buildings were inspected in a one to two week period.) The University reports that it is working with the State Fire Marshal, utilizing the latest reports from that office and the comprehensive facilities condition analysis, conducted by ISES Corporation of Stone Mountain, Georgia, to determine solutions to building deficiencies recognizing the immediate and long-term use (or non use) of the facility.

The institutions report that they are dealing appropriately with environmental safety issues, and have developed the necessary plans to address them.

Deferred Maintenance: From FY 1993 through FY 2006, deferred maintenance projects totaling $172.9 million (an average of $12.4 million per year) were completed by the Regent institutions in general fund buildings and utilities. Projects planned for or continued in FY 2007 total $23.6 million. Institutional data are shown on Table 2, Page 15. Deferred maintenance can also be corrected as part of a major renovation project.

The table on the following page summarizes the deferred maintenance reported by the institutions. (Dollar amounts for projects to be undertaken in FY 2007 and the deferred maintenance components of ongoing renovation projects are not included.)

The amount of reported deferred maintenance is $51.2 million (12.6%) higher than the amount reported in Fall 2005. The total amount increased from $405.3 million to $456.5 million. All institutions reported an increase, with the increases ranging from $25,000 at Iowa School for the Deaf to $29.2 million at the University of Iowa.

The University of Iowa's current estimate of the amount of deferred maintenance in buildings is based upon the assessment undertaken by ISES Corporation. The firm's inspections provided a profile of existing facility conditions and identified deferred maintenance, capital renewal and plant adaptation needs. The analyses of deferred maintenance resulted in the identification of specific deficiencies and corresponding scopes and costs for corrections and modifications. In the spring of 2006, ISES began a review of the University's utility infrastructure including the power, water, chilled water plants; electrical and steam distribution systems; and sanitary and storm sewers. The reports are expected in early 2007.

The University reports that due to the interrelationship of deferred maintenance, capital renewal and plant adaptation, ISES found that the University's deferred maintenance backlog could more than double within the next 10 years unless the University is able to reach a funding threshold that meets future capital renewal needs.

Iowa State University reports that it has a comprehensive systematic process for identifying its deferred maintenance needs. The methodology involves assessing all general fund buildings in eight different categories. The assessment takes into account the replacement value of the building, the value of the sub-systems within the building, the age of the building and its systems, and the condition of those systems. The process was expanded during FY 2005 to also include building specific assessments to create project estimates for repair and

replacement of building system components, such as an air handler, exterior building entrance steps, etc.; the data are entered into the facilities management system which provides data base management.

In FY 2004, a team of University of Northern Iowa Facilities Services staff conducted an assessment of general fund buildings to update the deferred maintenance information. This year, the compiled information from last year was reviewed by a team of managers and supervisors and updated.

Total Deferred Maintenance
General Fund Facilities and Utilities
Fall 2006[1]
($ Thousands)

	SUI[3]	ISU	UNI	ISD	IBSSS	Total
Individual Projects:						
Buildings[2]	$ 138,815.3[4]	$157,454.0	$ 40,019.5	$1,370.0	$ 958.8	$338,617.6
Utilities	13,558.0[5]	11,442.5	21,940.1	245.0	30.0	47,215.6
Total	$ 152,373.3	$168,896.5	$ 61,959.6	$1,615.0	$ 988.8	$385,833.2
Included as Part of Projects in Board Approved Five-Year Plan (FY 2008-FY2012):						
Buildings[2]	$ 41,336.5[6]	$ 6,807.1	$ 16,770.9			$ 64,914.5
Utilities	0.0	0.0	5,800.0			5,800.0
Total	$ 41,336.5	$ 6,807.1	$ 22,570.9			$ 70,714.5
Grand Total:						
Buildings[2]	$ 180,151.8	$164,261.1	$ 56,790.4	$ 1,370.0	$ 958.8	$403,532.1
Utilities	13,558.0	11,442.5	27,740.1	245.0	30.0	53,015.6
Total	$ 193,709.8	$175,703.6	$ 84,530.5	$ 1,615.0	$ 988.8	$456,547.7

[1]Does not include dollar amounts for projects to be undertaken in FY 2007 and the deferred maintenance components of ongoing renovation projects.

[2]Includes site work.

[3]Includes Oakdale.

[4]Includes Oakdale Hall, all or a portion of which will be demolished upon completion of the new Hygienic Laboratory.

[5]The report on the facilities condition assessment of utilities is anticipated to be received in early 2007.

[6]Includes the International Center, which will be demolished as the site for the new College of Public Health facility.

The University of Iowa Hospitals and Clinics has not reported any deferred maintenance and indicates that it does not have any maintenance needs that meet the definition of deferred maintenance.

TABLE 1
BOARD OF REGENTS, STATE OF IOWA
FIRE SAFETY PROJECTS*
GENERAL FUND FACILITIES
($ Thousands)

	SUI**	UIHC	ISU	UNI	ISD	IBSSS	Total
Projects:							
Completed Projects:							
FY 1993	$ 1,476.5	$ 507.3	$ 1,135.6	$ 551.3		$ 11.0	$ 3,681.7
FY 1994	721.2	619.2	365.6	447.3	$ 111.5	6.9	2,271.7
FY 1995	1,664.2	619.4	153.6	62.5	97.5	10.9	2,608.1
FY 1996	2,233.4	55.0	2,163.7	83.6	211.5	4.0	4,751.2
FY 1997	1,320.0	380.0	235.8	63.8	91.5	41.2	2,132.3
FY 1998	1,401.0	1,552.3	735.9	126.3	125.0	8.1	3,948.6
FY 1999	1,696.0	1,880.8	288.0	12.2	225.0	8.4	4,110.4
FY 2000	1,272.0	2,335.0	219.0	64.3	12.0	1.0	3,903.3
FY 2001	944.0	2,071.7	538.3	77.5	1.0	-	3,632.5
FY 2002	718.0	1,322.7	542.8	8.2	25.0	-	2,616.7
FY 2003	930.0	1,377.0	336.9	26.3	23.0	65.0	2,758.2
FY 2004	1,554.5	915.9	295.5	25.0	6.0	-	2,796.9
FY 2005	1,502.0	2,103.0	177.0	25.0	25.0	-	3,832.0
FY 2006	1,637.0	2,058.6	215.9	30.0	-	1.7	3,943.2
Subtotal	$ 19,069.8	$ 17,797.9	$ 7,403.6	$ 1,603.3	$ 954.0	$ 158.2	$ 46,986.8
Projects Planned for or Continued in FY 2007	$ 945.0	$ 650.0	$ 1,135.0	$ 25.0	$ -	$ 359.9	3,114.9
Total	**$ 20,014.8**	**$ 18,447.9**	**$ 8,538.6**	**$ 1,628.3**	**$ 954.0**	**$ 518.1**	**$ 50,101.7**
By Source of Funds:							
Building Renewal / General University	$ 9,248.2		$ 3,738.1	$ 626.2	$ 516.0	$ 179.8	$ 14,308.3
Income from Treasurer's Temporary Investments	6,615.0		542.8	174.8	-	-	7,332.6
Academic Building Revenue Bonds	2,587.6		3,206.7	826.0			6,620.3
Special and Capital Appropriations	1,000.0		1,000.0	-	385.0	277.3	2,662.3
University Hospital Building Usage Funds		$ 18,447.9					18,447.9
Other	564.0		51.0	1.3	53.0	61.0	730.3
Total	**$ 20,014.8**	**$ 18,447.9**	**$ 8,538.6**	**$ 1,628.3**	**$ 954.0**	**$ 518.1**	**$ 50,101.7**

* Does not include fire safety components of major renovation projects.

**SUI - Excludes UIHC; includes projects approved and funded for FY 93 - FY 03; for FY 1993 also includes projects completed with Academic Building Building Revenue Bonds, 1991. Includes fire safety improvements in Old Capitol - Fire Restoration and Buildings Improvements and Chemistry Renovation projects.

TABLE 2
BOARD OF REGENTS, STATE OF IOWA FY 1993 - FY 2007
GENERAL FUND BUILDING AND UTILITY DEFERRED MAINTENANCE PROJECTS AND
RENOVATION PROJECTS WHICH INCLUDE CORRECTION OF DEFERRED MAINTENANCE
($ thousands)

Deferred Maintenance Projects:	**SUI**	**ISU**	**UNI**	**ISD**	**IBSSS**	**Total**
Completed Projects:*						
FY 1993	$ 6,591.9	$ 970.2	$ 1,593.4	$ 45.0	$ 16.1	$ 9,216.6
FY 1994	2,881.6	1,881.1	1,459.6	543.5	75.9	6,841.7
FY 1995	4,922.1	7,805.3	1,703.1	148.0	24.8	14,603.3
FY 1996	6,571.3	6,944.4	2,581.3	173.0	207.8	16,477.8
FY 1997	3,262.6	2,953.8	2,256.7	133.1	95.6	8,701.8
FY 1998	3,053.0	3,495.3	1,677.7	282.5	172.5	8,681.0
FY 1999	2,928.8	3,492.2	3,435.2	470.0	36.8	10,363.0
FY 2000	6,375.4	5,522.2	3,859.1	758.0	595.1	17,109.8
FY 2001	3,798.2	6,104.2	858.7	485.0	49.1	11,295.2
FY 2002	2,598.9	2,463.9	3,442.6	660.0	1,159.8	10,325.2
FY 2003	7,377.6	4,194.8	439.4	165.0	69.3	12,246.1
FY 2004	7,154.0	4,187.5	761.5	596.3	56.0	12,755.3
FY 2005	9,695.8 **	5,253.1	1,400.0	625.0	53.0	17,026.9
FY 2006	12,434.8 **	2,764.8	964.8	1,040.0	23.8	17,228.2
Subtotal	$ 79,646.0	$ 58,032.8	$ 26,433.1	$ 6,124.4	$ 2,635.6	$ 172,871.9
Projects Planned for or Continued in FY 2007	13,596.2 **	7,338.7	1,712.1	175.0	811.7	$ 23,633.7
Total	**$ 93,242.2**	**$ 65,371.5**	**$ 28,145.2**	**$ 6,299.4**	**$ 3,447.3**	**$ 196,505.6**
FY 1993 - FY 2006 Renovation Projects Which Include Correction of Significant Amounts of Deferred Maintenance* **	**$ 64,992.6**	**$ 45,887.2**	**$ 34,851.0**			**$ 145,730.8**
Renovation Projects Planned or Continued for FY 2007 with Correction of Significant Amounts of Deferred Maintenance** **	**$ 43,367.0**	**$ 17,888.9**	**$ 40,000.0**			**$ 101,255.9**
GRAND TOTAL	**$ 201,601.8**	**$ 129,147.6**	**$ 102,996.2**	**$ 6,299.4**	**$ 3,447.3**	**$ 443,492.3**
Total - By Source of Funds						
Building Renewal/Building Maintenance/General University	$ 38,311.5	$ 42,023.3	$ 21,965.9	$ 2,063.1	$ 1,658.5	$ 106,022.3
Building Renewal/Academic Building Revenue Bonds	33,040.0		83.5			33,123.5
Income from Treasurer's Temporary Investments (TTI)	13,208.1	11,353.7	805.7			25,367.5
Gifts, Grants	2,580.7	16,815.6				19,396.3
Utility Renewal and Replacement and Revenue Bonds	42,544.0	11,135.0				53,679.0
Academic Building Revenue Bonds; Project Notes	19,513.3	11,862.2	28,898.6			60,274.1
Capital and Special Appropriations	25,990.0	15,642.6	48,602.7	2,755.0	1,499.0	94,489.3
Agriculture Experiment Station & Cooperative Extension		1,175.2				1,175.2
Facilities Overhead Use Allowance	1,679.0	982.5				2,661.5
College of Medicine Gifts / Treasurer's Temporary Investments	2,468.4					2,468.4
College of Medicine Earnings and Gifts	1,645.9					1,645.9
College of Medicine Earnings, Gifts / Treasurer's Temp. Investment	4,114.3					4,114.3
Other (includes unspecified combination of above fund sources)	20,620.9	18,157.5	2,639.8	1,481.3	289.8	43,189.3
GRAND TOTAL - INDIVIDUAL DEFERRED MAINTENANCE ITEMS AND RENOVATION COSTS	**$ 201,601.8**	**$ 129,147.6**	**$ 102,996.2**	**$ 6,299.4**	**$ 3,447.3**	**$ 443,492.3**

Notes:

* SUI - includes projects approved and funded for FY 93 - FY 96; for FY 1993 also includes projects completed with Academic Building Revenue Bonds.

** Includes Oakdale campus.

*** Renovation projects include SUI - Gilmore Hall, Schaeffer Hall, Phillips Hall, Bowen Science Building Microbiology, Medical Education Building, Hancher Auditorium, Engineering Building, Biological Sciences - Phase 2, Hydraulics Laboratory Modernization and Old Capitol; ISU - Catt Hall, Laboratory of Mechanics, Gilman Hall and Systems Upgrade, State Gym, Beardshear Hall, Hamilton Hall, Physics Hall Auditorium and Carver Hall Renovations. UNI - Seerley, Wright and Lang Halls, and Commons Renovations, Steam Distribution System Replacement - Phase 1.

****Includes projects under construction or for which funding has been provided; includes SUI - Art Buildings and Chemistry Renovations; ISU - Pearson and Morrill Hall Renovation, Crop Genomics Info. Lab Remodel; UNI - Innovative Teaching and Technology Center, Science Buildings Renovation, Phase 1; Russell Hall Renovation and Electrical Distribution System.